COASTAL CONSERVANCY

Staff Recommendation
May 18, 2005

HUMBOLDT FISH PASSAGE IMPROVEMENT PROJECTS

File No. 05-024
Project Manager: Michael Bowen

RECOMMENDED ACTION: Authorization to disburse up to $78,000 to the County of Humboldt ("County") to design one fish passage improvement project at Rocky Gulch, and implement one fish-passage improvement project at Saunder's Creek, within the County of Humboldt.

LOCATION: Rocky Gulch, tributary to Humboldt Bay, and Saunder's Creek, tributary to the Mattole River, in Humboldt County (Exhibit 1).

PROGRAM CATEGORY: Resource Enhancement

EXHIBITS

Exhibit 1: Project Location and Site Maps

Exhibit 2: Letters of Support

Exhibit 3: Mitigated Negative Declaration

Exhibit 4: Mitigation Monitoring and Reporting Program

Exhibit 5: Inventory of Barriers to Fish Passage (Separate CD)

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following Resolution pursuant to Sections 31251-31270 of the Public Resources Code:

"The State Coastal Conservancy hereby authorizes the disbursement of an amount not to exceed seventy-eight thousand dollars ($78,000) to the County of Humboldt to design a fish passage improvement project at Rocky Gulch and implement a fish passage improvement project at Saunder's Creek, subject to the following conditions:

1. Prior to the disbursement of funds for the implementation, the County shall provide and the Executive Officer of the Conservancy shall approve in writing:

a) A work program, schedule of completion, project budget, and any subcontractors to be employed for the project;

b) evidence that all necessary permits have been obtained.
c) A signage plan acknowledging the Conservancy and Proposition 12 funding.

2. The County shall install and maintain a sign acknowledging Conservancy and Proposition 12 funding at the project site.

3. Prior to disbursement of funds for the design project on Rocky Gulch, the County shall submit for the review and approval of the Conservancy's Executive Officer a work program, budget, and any subcontractors to be employed for the project."

Staff further recommends that the Conservancy adopt the following findings:

"Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed projects are consistent with the purposes and criteria set forth in Chapter 6 of Division 21, sections 31251 – 31270 of the Public Resources Code regarding the enhancement of coastal resources.
2. The proposed authorization is consistent with the Project Selection Criteria and Guidelines adopted by the Conservancy on January 24, 2001.

3. The Conservancy has independently reviewed the Negative Declaration prepared and adopted on May 19, 2003 by the Department of Fish and Game, attached as Exhibit 3, and finds that there is no substantial evidence that the Saunder's Creek project will have a significant effect on the environment, as defined in 14 California Code of Regulations Section 15382.

4. There is no evidence before the Conservancy that the Saunders Creek fish barrier removal project will have a potentially adverse effect, either individually or cumulatively, on wildlife resources as defined under California Fish and Game Code 711.2.

5. The Conservancy has on the basis of substantial evidence rebutted the presumption of adverse effect contained in 14 California Code of Regulations Section 753.5(d) regarding the potential for the Saunder's Creek project to have an adverse effect on wildlife resources as defined under California Fish and Game Code Section 711.2."

PROJECT SUMMARY:

Staff recommends authorization to disburse up to $78,000 to the County of Humboldt ("County") to design one and implement one fish passage improvement projects. The purpose of this authorization is to improve fish passage in streams where barriers to fish passage have resulted from the inappropriate design and construction of road crossings or other instream structures. Historically, road crossings, culverts, and other structures were inappropriately constructed, inadvertently preventing the upstream passage of anadromous fish, such as salmon,

steelhead and coastal cutthroat trout. The proposed fish passage projects are located at: Rocky Gulch and Saunder's Creek, both in Humboldt County.

Rocky Gulch, a tributary to Humboldt Bay, is located approximately four miles south of the town of Arcata. The project consists of planning for the modification of a county road crossing. Rocky Gulch contains approximately 2.7 miles of potential habitat, less than one mile of which is currently accessible. The County road crossing, the subject of the planning grant and the first barrier in the system, is located at the intersection of the Old Arcata Road and Rocky Gulch, 0.8 miles upstream of Humboldt Bay. Design of the Old Arcata Road crossing will facilitate the County's construction of a fish passage improvement project at that site in fiscal year 2005-2006. A private road crossing on Rocky Gulch is located 1.1 miles upstream of Humboldt Bay, and is also the site of a proposed fish passage improvement project by the County. Removal of both of these structures and replacement with a bridge and a bottomless arch culvert will permit free access for salmonids throughout the 2.7 miles of habitat.

Saunders Creek, a tributary to the lower Mattole River, is the subject of a project to replace a culvert located less than 300' upstream of the confluence of Saunders Creek and the Mattole River. Replacing this degraded and impassable barrier to fish migration with a bottomless arch culvert will open up approximately .7 miles of anadromous fish habitat.

Like many such structures, these culverts have prevented fish from ascending streams due to excessive heights between culvert outlets and plunge pools below, and impassably high flow velocities within the culverts themselves. Fish capable of ascending barriers are often too fatigued to spawn. Fish prevented from ascending such culverts typically congregate in discharge pools below the culvert, where they may fall prey to predators or poachers. Moreover, culvert failures often result in road failure, mass failure of slopes, resultant erosion, property damage, and the degradation of waters and salmonid habitat downstream.

These and thousands of other such barriers to fish passage have been identified, and are cited in the Conservancy's recently completed report, "Inventory of Barriers to Fish Passage in California's Coastal Watersheds," a compact disk copy of which is provided as Exhibit 5.

Project History: In 1997, the Counties of Del Norte, Humboldt, Mendocino, Siskiyou, and Trinity agreed to collaborate on a proactive response to the federal listings of salmon as threatened species by forming the Five Counties Salmonid Conservation Program ("FCSCP"). The goal was to seek opportunities to contribute to the long-term recovery of salmon and steelhead in Northern California. The objectives were to: evaluate options for improving county plans, policies, and practices to provide or improve salmonid habitat; identify areas where Counties might be vulnerable to challenges under the ESA; and upgrade training programs and recovery project monitoring and reporting procedures. Initial meetings identified causative factors of salmonid declines and how county infrastructure contributed to that decline, information gaps on limits to salmonid recovery, and priority tasks required to obtain missing information necessary for concerted recovery efforts. A high-priority task included conducting culvert inventories on county roads to evaluate fish passage and prioritize treatments.

The inventories and fish passage evaluations of culverts within the five counties' road systems were conducted between 1998 and 2000. The objective was to assess passage of juvenile and

adult salmonids and develop project scheduling documents to prioritize corrective treatments to provide unimpeded fish passage. The inventories were limited to county-maintained crossings within anadromous stream reaches known to historically and/or currently support runs of coho salmon (*Oncorhynchus kisutch*), chinook salmon (*O. tshawytschia*), and/or steelhead (*O. mykiss irideus*).

Following completion of the final fish passage barrier reports, two of the counties sought financial assistance for project implementation from the Conservancy, and others sought funds from the California Department of Fish and Game. Subsequently, the Conservancy authorized grants to the Counties of Humboldt and Del Norte to help implement 10 fish passage improvement projects. These included: Lindsay Creek, a tributary to Mad River, and considered the best coho salmon and coastal cutthroat trout tributary within the entire Mad River watershed; And North and South Fork Anker Creek, tributaries to the Mad River. All of these projects have enjoyed tremendous success, with documented spawning and rearing of coho, steelhead, and Chinook salmon above the former barriers. Additionally, at the June, 2002 meeting, the Conservancy approved the Digger Creek Barrier Removal Project in Mendocino County, which was originally identified as a high priority in the Mendocino County inventory.

Simultaneously, and in response to an appropriation from the Salmon Habitat Restoration Program, sponsored by Senator Byron Sher (D-Palo Alto), the Conservancy conducted an extensive and first-of-its-kind inventory of existing fish passage barrier data for coastal California streams. That report identifies more than 20,000 potential barriers to fish passage, 65 of which are high – priority artificial total barriers to fish passage.

In an effort to expedite the design and permitting of high – priority projects, the Conservancy awarded a design and permitting grant to the County of Trinity to design, permit and prepare for implementation at least ten fish passage improvement projects on August 14, 2003. The County of Trinity and its partners in Humboldt County have utilized this grant effectively, leveraging the planning grant by securing funds to implement nearly all of the projects, and thereby ensuring the timely implementation of the projects. The Counties recently celebrated the 100th mile of historic habitat reopened to spawning and rearing for pacific salmon.

If approved, this proposed authorization would further increase the number of successfully implemented projects, and reopen an estimated additional 2 miles of historic Coho salmon and steelhead habitat.

PROJECT FINANCING:

Coastal Conservancy	$78,000
Department of Fish and Game (Saunder's Cr.)	$259,540
Humboldt County (Saunder's Cr. Engineering)	$40,000
American Rivers (Saunder's Cr.)	$50,000
Total Project Cost	**$78,000**

The expected source of Conservancy funds for this authorization is the appropriation to the Conservancy from the Safe Neighborhood Parks, Clean Water, Clean Air and Coastal Protection Bond Act of 2000 (Proposition 12), Coastal Salmon Funds.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

The proposed projects are undertaken pursuant to Chapter 6 of Division 21 of the Public Resources Code (Sections 31251-31270, respectively), as follows:

Pursuant to Section 31251, the Conservancy may award grants to local public agencies and non-profit organizations for the purpose of enhancement of coastal resources which, because of human-induced events, or incompatible land uses, have suffered loss of natural and scenic values. Consistent with this section, the proposed authorization provides funds to the County to enhance coastal fishery resources disturbed by incompatible land uses, such as inappropriate culvert installation.

Pursuant to §31251.2(a), "In order to enhance the natural or scenic character of coastal resources within the coastal zone, the Conservancy may undertake a project or award a grant…to enhance a watershed resource that is partly outside of the coastal zone…." Consistent with this section, the County, which is located partially outside of the coastal zone, requested Conservancy assistance with projects located within and outside the coastal zone. This assistance was sought in order to design one and implement three projects intended to benefit salmon populations known to travel many miles upstream of the coastal zone boundary in order to fulfill their life history patterns. Indeed, salmon depend on unimpeded access to high quality habitat both within and outside of the coastal zone in order to survive. If salmon and other highly prized aquatic resources are to be maintained and restored to historic levels, funding must be provided to improve salmon habitat both within and outside the coastal zone. This section also requires the support of the California Department of Fish and Game. The Department is highly supportive of these projects, and a letter of support letter for this authorization from the Department is included in Exhibit 2.

Pursuant to Section 31252, all areas proposed for resource enhancement should be identified in a certified local coastal plan or program as requiring public action to resolve existing or potential resource problems. The project work areas are located outside of the Coastal Zone. However, the aquatic resources and habitat quality of stream channels within and outside of the coastal zone boundaries are inextricably linked. Thus, the project is consistent with the policies of the Humboldt Bay Local Coastal Program which states:

"The biological productivity and the quality of coastal waters, (and) streams…appropriate to maintain optimum populations of marine organisms…shall be maintained, and, where feasible, restored through…minimizing alteration of natural streams.") (LCP, 3-55).

"New development within stream channels shall be permitted when there is no less environmentally damaging feasible alternative, where the best feasible mitigation measures have been provided to minimize environmental effects, and shall be limited to…wetlands, fishery, and wildlife enhancement and restoration projects…." (LCP, 3-56).

Finally, pursuant to Section 31253, "(the) Conservancy may provide up to the total of the cost of any coastal resource enhancement project…." and the amount of the Conservancy contribution shall be determined only after an assessment of funding generally available and other factors. The proposed contribution by the Conservancy was determined based on application of priority criteria, as discussed below, and after taking into account other available resources and the matching contributions to the project by other funding sources.

CONSISTENCY WITH CONSERVANCY'S STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):

Consistent with **Goal 6 Objective A** of the Conservancy's Strategic Plan, the proposed projects will contribute to the development of approximately 70 plans and projects that preserve and restore coastal watersheds and create river parkways.

Consistent with **Goal 6 Objective A(1)** of the Conservancy's Strategic Plan, the proposed authorization will leverage the results of the recently completed study of barriers to fish passage, through the implementation of projects to improve habitat for anadromous fish. The proposed authorization will enable the Conservancy, in concert with the grantee, to increase available habitat for aquatic species, notably salmon, by preparing to remove an instream barriers to fish passage at Saunder's Creek, and by designing a fish passage improvement project at Rocky Gulch. By employing the Conservancy's recently completed report, "An Inventory of Barriers to Fish Passage in California's Coastal Watersheds," as well as the expertise of the grantee, the Conservancy will ensure measurable increases in available habitat and, presumably, measurable increases in anadromous fish populations within and above the project areas. In order to ensure the success of this strategy, Conservancy staff will, in conjunction with the grantee, monitor the efficacy of the projects and chronicle the degree of success at each site.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA & GUIDELINES:

The proposed authorization is consistent with the Conservancy's Project Selection Criteria and Guidelines adopted January 24, 2001, in the following respects:

Required Criteria

1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
2. **Consistency with purposes of the funding source:** See the "Project Financing" section above.
3. **Support of the public:** Supporters of these projects include Assemblymember Patty Berg, the Department of Fish and Game, National Oceanic and Atmospheric Administration: Fisheries, the County of Humboldt, and others. Letters of support are included in Exhibit 2.
4. **Location:** The project sites are located and described in the project summary section and geographically depicted on Exhibit 1.

5. **Need:** The County of Humboldt is especially rich in anadromous fish resources. However, existing barriers obstruct recovery within the full geographic range of species either listed or potentially listed under the federal and State endangered species acts. The removal of these prioritized barriers will substantially increase recovery efforts for these important fishery resources by providing anadromous salmonids access to spawning and rearing sites in upper portions of the watersheds.

6. **Greater-than-local interest:** The public trust value of California's salmon and steelhead populations is of great interest to all, and is a natural legacy too precious to lose. Moreover, the historic economic contributions from sport and commercial fishing can be recovered for the overall economic benefit of the State of California.

Additional Criteria

7. **Urgency:** Coho salmon are currently at six to 15% of their abundance during the 1940s. Given this decline, and in light of the State Recovery Strategy's primary objective of returning coho salmon to a level of sustained viability, while protecting their genetic integrity, enhancement projects with a high potential for recovering local populations of coho salmon are a high priority for the State.
8. **Leverage:** See the "Project Financing" section above.
9. **Innovation:** This partnership to recover anadromous fish populations through the improvement of existing County infrastructure, such as road culverts, represents an important trend in local government towards the proactive improvement of salmonid habitat on County property.
10. **Readiness:** The County has demonstrated that it has the experience, expertise, local public support, and administrative capability necessary to commence and complete the projects in a timely fashion.
11. **Realization of prior Conservancy goals:** The Conservancy has authorized grants to both the Humboldt Bay Harbor Commission and the Redwood Community Action Agency for the purpose of developing enhancement plans for Humboldt Bay and its tributary streams. The tributary streams and wetlands assessed in these plans serve as the nurseries of the juvenile salmonids outmigrating from tributary streams to Humboldt Bay. Therefore, the improvement of salmonid habitat in all streams tributary to Humboldt Bay will amplify enhancement measures regionally by increasing available upstream salmonid habitat. Similarly, the Conservancy has provided several grants to the Mattole Restoration Council and others for the purpose of improving fishery habitat in the Mattole watershed. Moreover, these projects will further the Conservancy's goal of enhancing coastal watersheds generally.
12. **Cooperation:** The County, funding partners, and regulatory agencies have all proven themselves hearty supporters of fish passage improvement efforts. The unprecedented level of cooperation on these types of projects has directly resulted in the implementation of successful projects that have provided increased habitat and increased populations of anadromous fish in our coastal watersheds.

CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:

The project work areas are located outside of the Coastal Zone. However, the aquatic resources and habitat quality of stream channels within and outside of the coastal zone boundaries are inextricably linked. Thus, the Rocky Gulch project is consistent with the policies of the Humboldt Bay Local Coastal Program which states:

"The biological productivity and the quality of coastal waters, (and) streams…appropriate to maintain optimum populations of marine organisms…shall be maintained, and, where feasible, restored through…minimizing alteration of natural streams.") (LCP, 3-55).

"New development within stream channels shall be permitted when there is no les environmentally damaging feasible alternative, where the best feasible mitigation measures have been provided to minimize environmental effects, and shall be limited to…wetlands, fishery, and wildlife enhancement and restoration projects…." (LCP, 3-56).

The Saunder's Creek project work area is also located outside of the Coastal Zone. However, the aquatic resources and habitat quality of stream channels within and outside of the coastal zone boundaries are inextricably linked. Thus, the Saunder's Creek project is consistent with the policies of the Humboldt County General Plan, Volume II, South Coast Area Plan of the Humboldt County Local Coastal Program which states:

"The biological productivity and the quality of coastal waters, (and) streams…appropriate to maintain optimum populations of marine organisms…shall be maintained, and, where feasible, restored through…minimizing alteration of natural streams.") (LCP, 3.41E).

"New development within stream channels shall be permitted when there is no les environmentally damaging feasible alternative, where the best feasible mitigation measures have been provided to minimize environmental effects, and shall be limited to…wetlands, fishery, and wildlife enhancement and restoration projects…." (LCP, 3.41E 3(a)).

COMPLIANCE WITH CEQA:

The Saunder's Creek project was reviewed in the Department of Fish and Game's Mitigated Negative Declaration (MND) and adopted May 19, 2003 by DFG; DFG filed a notice of determination that same day. No comments were received during the comment period. The MND is included as Exhibit 3.

In the MND, the DFG found that the modification of culverts to remove fish barriers, classified in the environmental documents as "major action items," may have the potential to cause minor short-term impacts on soil, vegetation, wildlife, water quality, and aquatic life, but that the measures to be incorporated into the project will lessen such impacts to an insignificant level. Therefore, the DFG found, the projects will have no significant environmental impact.

Upon its independent review of the DFG's 2003 Mitigated Negative Declaration for the project, staff recommends that the Conservancy find that the project does not have a potential for a

significant effect on the environment as defined under 14 California Code of Regulations Section 15382, or on wildlife resources, as defined under Fish and Game Code Section 711.2. Upon approval, staff will file a Notice of Determination for the Saunder's Creek project.

The planning and design of the Rocky Gulch project involves only data gathering, planning, and feasibility analyses for possible future actions and is thus statutorily exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to 14 California Code of Regulations Section 15262. Staff will file a Notice of Exemption upon approval.